

Guitar pickups are provided herein comprising an upper bobbin, a ferromagnetic steel plate and a lower bobbin, stacked on top of each other, oriented longitudinally and laterally substantially the same, and held together by ferromagnetic screws. An upper coil is wounded around a middle section of the upper bobbin, and a lower coil is wounded in an opposite manner around a middle section of the lower bobbin, whereby the upper and lower coils are connected in series. The upper and lower bobbins, and steel plate each include a plurality of coaxial apertures to receive corresponding permanent magnetic pole pieces that extend from the upper bobbin to the lower bobbin. The upper and lower bobbins include additional apertures to receive ferromagnetic cylinders to selectively change the tonal characteristics of the guitar. The pickups may include a pair of ferromagnetic plates attached to the longitudinal sides of the lower bobbin that extend upwards to about the middle of the upper coil. These ferromagnetic plates concentrate the electromagnetic fields around the coils. A guitar in combination with these pickups is provided herein.